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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,353	08/13/2001	Shuhei Ishikawa	789-071	8579

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EXAMINER

TURNER, ARCHENE A

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/913,353

Applicant(s)

ISHIKAWA ET AL.

Examiner

Archene Turner

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> | 6) <input type="checkbox"/> Other:  |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23, 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "and the like" in the above claims, render the claims indefinite.

3. Claim 25, 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the applicant is trying to claim, rendering the claims indefinite.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United

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States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-3,5-16, 18-22,24-33,35-39,41-65 rejected under 35 U.S.C. 102(a) as being anticipated by Hitachi (JP 11061292).

Hitachi discloses a copper carbon composite within the claimed proportions, used as a heat sink, with the addition of the claimed components. The claimed conductivity and expansion are considered inherent to the disclosed composition.

6. Claims 1-3,5-8,11-15,26-30,44-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Hitachi (JP 56161647) or Maruyama et al (5,580,658) or Weeks, Jr. (5,410,796).

Hitachi or Maruyama et al or Weeks, Jr. discloses a copper carbon composite within the claimed proportions, used as a heat sink, with the claimed conductivity and expansion.

7. Claims 1-3,5-8,11-15,26-30,44-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Pechiney (JP 4329845) or Dermarker et al (5,347,426).

Pechiney or Dermarker et al discloses an aluminum carbon composite within the claimed proportions, used as a heat sink, with the claimed conductivity and expansion .

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8. Claims 1-65 rejected under 35 U.S.C. 102(b) as being anticipated by Osaka (JP 10168502) or Newkirk et al (5,848,349) or Colella et al (5,783,316).

Osaka or Newkirk et al or Colella et al discloses a copper carbon composite within the claimed proportions, used as a heat sink, with the addition of the claimed components. The claimed conductivity and expansion are considered inherent to the disclosed composition.

9. Claims 1-8,11-15,26-30,44-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Montesano et al (5,455,738) or Burnham et al (5,008,737) or Wei et al ("Improvements of wear...incorporation of metals").

Montesano et al or Burnham et al or Wei et al discloses a metal diamond composite within the claimed proportions, used as a heat sink, with the claimed conductivity and expansion.

10. Claims 1-8,11-15,20-21,26-30,44-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Supan et al (5,120,495).

Supan et al discloses a metal diamond composite within the claimed proportions, used as a heat sink, with the claimed conductivity and expansion .

11. Claims 1-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuji et al (4,4425,315 or 4,33,986).

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Tsuji et al discloses a metal diamond composite within the claimed proportions, used as a heat sink, with the addition of the claimed components. The claimed conductivity and expansion are considered inherent to the disclosed composition.

12. Claims 1-3,5,14,26-28, 30,44 are rejected under 35 U.S.C. 102(b) as being anticipated by Klages et al ("Microstructure...carbon films')

Klages et al discloses a metal carbon composite within the claimed proportions, used as a heat sink, with the claimed conductivity and expansion.

13. Claims 1-2,4,14,26-28,30,44 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferrando et al (H1358).

Ferrando et al discloses a silver diamond composite within the claimed proportions, used as a heat sink, with the addition of the claimed conductivity and expansion.

14. Claims 1-3,5-65 rejected under 35 U.S.C. 102(e) as being anticipated by Polese et al (6,238,454) or Klett et al (6,037,032) or Gungor et al (5,944,097).

Polese et al or Klett et al or Gungor et al discloses a metal diamond composite within the claimed proportions, used as a heat sink, with the addition of the claimed components, exhibiting the claimed conductivity and expansion.

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15. Claims 1-2,4-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishibayahi (6,171,691 or 6,031,285) or Shi et al (6,143,142).

Nishibayashi or Shi et al discloses a metal diamond composite within the claimed proportions, used as a heat sink, with the addition of the claimed components, exhibiting the claimed conductivity and expansion.

16. Any inquiry regarding this communication or earlier communications from the Examiner should be directed to Archene Turner, whose telephone number is (703) 308-4344. The Examiner can normally be reached Monday to Thursday from 8:30 AM to 6:00 PM.

A facsimile center has been established in Group 1700, Crystal Plaza 2, 8th floor, reception area. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 305-3599 (for official after final faxes) or (703) 305-5408 (for all other official faxes). This location should be used in all instances when faxing any correspondence to Art Unit 1775. Use of the Group 1700 center will facilitate rapid delivery of materials to Examiners in Art Unit 1775.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**A. A. Turner**  
**Primary Examiner**

*Group 1700*